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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/686,978 | 10/16/2003 | Richard Hugh Clark | TS7617 (US) | 8108 |
| 23632 | 7590 | 10/17/2005 | EXAMINER | |
| SHELL OIL COMPANY P O BOX 2463 HOUSTON, TX 772522463 | | | COSTALES, SHRUTI S | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1714 | |
| DATE MAILED: 10/17/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/686,978

Applicant(s)

CLARK ET AL.

Examiner

Shruti S. Costales

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/16/03, 12/08/03, 3/25/04, & 7/1/04,
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements submitted on October 16, 2003, December 8, 2003, and July 1, 2004 were filed in compliance with the provisions of 37 CFR § 1.97. Accordingly, the information disclosure statements filed by the applicant have been considered by the Examiner. It is to be noted that the information disclosure statement filed by the applicant on March 25, 2004 lists the same documents as those already listed on the information disclosure statement filed on December 8, 2003. Accordingly, the information disclosure statement filed on March 25, 2004 has not been considered by the Examiner.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "A fuel composition having a base fuel, a Fischer-Tropsch derived gas oil, and an oxygenate".

3. The disclosure is objected to because it contains an embedded hyperlink(s) and/or other form of browser-executable code at page 30, lines 21-24. Applicant is required to delete the embedded hyperlink(s) and/or other form of browser-executable code. See MPEP § 608.01.

4. The preliminary amendment filed July 1, 2004 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the replacement of g/cm^3 with kg/m^3 in Tables 2 and 3 on pages 27-29. The applicant is required to either cancel the new matter in the reply to this Office Action or provide specific support for such replacement in the originally filed specification.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 3-8 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More particularly, claims 3 and 13 recite "a neutral or close to neutral" [*Emphasis Added*] at lines 3 and 8 of claim 3 and at lines 2-3 and 7-8 of claim 13, wherein it is not clear to one of ordinary skill in the art what is meant by "close" and what degree of neutrality will meet the criteria of "close" to neutral. Claims 4-8 are rejected under 35 U.S.C. 112, second paragraph, as being dependent from a rejected base claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 3-16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roos et al. (U.S. Pre-Grant Publication Number 2002/0112466).

Roos discloses a diesel engine (Page 2, paragraph [0022]) being operated by a base fuel having oxygenates, wherein the base fuel includes diesel fuel and Fischer-Tropsch fuel (Page 4, paragraph [0045]). It is to be noted that the Fischer-Tropsch fuel intrinsically includes Fischer-Tropsch derived gas oil. The diesel engine includes a combustion chamber into which said composition is injected (Page 3, paragraph [0031]), wherein it would be intrinsic that the components within the composition would be blended together upon injection. The diesel engine including a combustion chamber of Roos intrinsically functions as a heating appliance having a burner wherein the fuel is injected and burned to produce energy including heat. A method of operating a combustion system is also disclosed (Page 5, paragraph [0056]).

The difference between Roos and the presently claimed invention is the requirement that the Fischer-Tropsch derived gas oil and the oxygenate are present in an amount effective to provide a) a neutral or close to neutral effect on elastomeric components compared to that of the base fuel, and/or b) a neutral or better emissions performance compared to that of the base fuel, optionally in addition to a neutral or close to neutral density for the composition with respect to that of the base fuel.

Roos discloses a composition that corresponds to the fuel composition presently claimed, therefore it would be intrinsic to the composition of Roos to provide a) a neutral or close to neutral effect on elastomeric components compared to that of the base fuel, and/or b) a neutral or better emissions performance compared to that of the base fuel, optionally in addition to a neutral or close to neutral density for the composition with

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respect to that of the base fuel, thereby obtaining the invention as set forth in the presently cited claims.

9. Claims 2, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roos as applied to claims 1, 3-16, 18, and 20 above, and further in view of Vogel et al. (U.S. Patent Number 5,004,478) and Arters et al. (U.S. Pre-Grant Publication Number 2003/0177692).

The difference between Roos and the presently claimed invention is the requirement that the oxygenate is an ester of either (i) a carboxylic acid, or (ii) a vegetable oil.

With respect to the difference in (i), Vogel, which is drawn to a motor fuel for engines (Col. 1, lines 5-6), discloses an ester of a monocarboxylic or polycarboxylic acid present in motor fuel, wherein the motor fuel is used to operate diesel engines (Col. 2, lines 19-34). It would have been obvious to one of ordinary skill in the art to add Vogel's ester as an oxygenate into Roos' composition because the ester solves the problem of valve stick in a highly satisfactory manner (Col. 7, lines 19-23; see also Col. 4, lines 57-68 and Col. 2, lines 7-18).

With respect to the difference in (ii), Arters, which is drawn to a method of operating an engine using a fuel composition (Page 1, paragraph [0002]), discloses oxygenates such as esters from vegetable oils (Page 2, paragraph [0027]). It would have been obvious to one of ordinary skill in the art to add to or substitute Arters' oxygenates with Roos' oxygenates because it is possible to achieve control of deposits

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in engines (Page 2, paragraph [0023]), thereby obtaining the invention as set forth in the presently cited claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shruti S. Costales whose telephone number is (571) 272-8389. The examiner can normally be reached on Monday - Friday, 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

SSC
Shruti S. Costales
October 12, 2005

Vasu Jagannathan
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